Salix exigua Shrubland [Provisional]

COMMON NAME Narrow-Leaf Willow Shrubland [Provisional]

SYNONYM Sandbar Willow Shrubland

PHYSIOGNOMIC CLASS Shrubland (III)

PHYSIOGNOMIC SUBCLASS Deciduous shrubland (III.B)

PHYSIOGNOMIC GROUP Cold-deciduous shrubland (III.B.2)

PHYSIOGNOMIC SUBGROUP Natural/semi-natural (III.B.2.N)

FORMATION Temporarily flooded cold-deciduous shrubland (III.B.2.N.d.)

ALLIANCE Salix exigua Temporarily Flooded Shrubland Alliance

CLASSIFICATION CONFIDENCE LEVEL 1

USFWS WETLAND SYSTEM Palustrine

RANGE

Globally

This community is found along rivers and streams in Oregon, Washington, Idaho, Montana, southern Manitoba, Wyoming, Colorado, Oklahoma, Nebraska, South Dakota. It probably extends into North Dakota.

Fort Laramie National Historic Site

This community occurs along the Laramie and Platte Rivers and in seepage areas north of the canal.

ENVIRONMENTAL DESCRIPTION

Globally

This community is found near lakes and streams on recently deposited or disturbed alluvial material. The parent material is alluvial sand, although silt, clay, or gravel may be present. Soil development is poor to absent (Steinauer 1989).

Fort Laramie National Historic Site

This community occurs on level sites on alluvial soils along the Laramie and Platte Rivers and in seepage areas north of the canal.

MOST ABUNDANT SPECIES

Globally

<u>Statum</u> <u>Species</u> Shrub <u>Salix exigua</u>

Herbaceous Carex pellita, Scirpus americanus

Fort Laramie National Historic Site Statum Species

Shrub Salix exigua, Populus deltoides

DIAGNOSTIC SPECIES

Globally Salix exigua Fort Laramie National Historic Site Salix exigua, young Populus deltoides (less than 3 m tall)

VEGETATION DESCRIPTION

Globally

The dominant vegetation in this community is short shrubs, usually not more than 4 meters tall. The most common of these is Salix exigua. Salix irrorata and saplings of Populus deltoides or S. amygdaloides are also frequently found in the shrub layer. This stratum can have moderate to high stem density in the community as a whole. The species in the shrub layer do not form a closed canopy, allowing significant light to reach the groundlayer. There are often patches where the shrub layer is absent. The herbaceous cover is sparse to moderate. Older stands and places with less competition from the shrubs have greater herbaceous cover. The composition of the herbaceous layer can vary greatly. Species that are often found in this community are Cenchrus longispinus, Polygonatum lapathifolium, Scirpus americanus, Triglochin maritimum, and Xanthium strumarium.

Fort Laramie National Historic Site

This community is dominated by *Salix exigua* and/or young *Populus deltoides* (less than 3 m tall). Both species dominate the tall and short shrub strata, and combined cover is usually greater than 50%, sometimes approaching 100%. Herbaceous cover is sparse and quite variable in composition.

OTHER NOTEWORTHY SPECIES Information not available.

CONSERVATION RANK G5Q

RANK JUSTIFICATION

DATABASE CODE CEGL001197

COMMENTS

Globally

This community is a primary or early secondary community and requires floods to create new areas on which it can develop. Once established, this community may not exist for more than 10-20 years before it is replaced by a later seral stage (Wilson 1970, Bellah and Hulbert 1979).

Fort Laramie National Historic Site

Some stands mapped as this type have very little *Salix exigua* and are dominated by young *Populus deltoides*. Succession to and from this community can be relatively rapid (several years), depending on flood events and rate of growth of the young cottonwoods.

REFERENCES

Bellah, R. G. and L. C. Hulbert. 1974. Forest succession on the Republican River floodplain in Clay County, Kansas. The Southwestern Naturalist 19(2):155-166.

Steinauer, G. 1989. Characterization of the natural communities of Nebraska. Pp. 103-141, in M. Clausen, M. Fritz, and G. Steinauer. The Nebraska Natural Heritage Program, Two Year Progress Report, Appendix D. Lincoln, NE.

Wilson, R. E. 1970. Succession in stands of Populus deltoides along the Missouri River in southeastern South Dakota. American Midland Naturalist 83(2):330-342.